



CDF Operations Report

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All Experimenters Meeting



This Week's Stores

Date	Store	Inst Lum (initial)	Delivered Lum [nb ⁻¹]	Lum to tape nb ⁻¹ (ε)	Comment
Tu 4/20	3421	37.7e30	1585	1436 (91%)	
We 4/21	3423	47.6e30	839	735 (88%)	Quench
Th 4/22	3434	44.8e30	2101	1633 (78%)	DCAS failure
Sa 4/24	3436	48.8e30	2364	2184 (92%)	TRF3 trip
Su 4/25	3444	56.0e30			In progress
Total			6888	5989 (87%)	



Silicon Detector

- Since the abort kicker prefires of the previous week, we've been cautious with the silicon detector.
 - We wanted to see stable behavior of the newly installed hardware.
- The silicon detector was run during store 3421 for about 2 hours of checkout.
- The silicon detector was integrated mid-store during stores 3423 to 3436.
 - Received minimal radiation during the quench of store 3423.
- We're now back to standard procedure, including the silicon detector from the start.



COT Status

- COT is still operating in the protective state.
 - SL1,2,3 off, SL4,5 at 50% gain
 - Gas flow is reversed from last fall.
- Preparations for the recirculating gas system are well advanced.

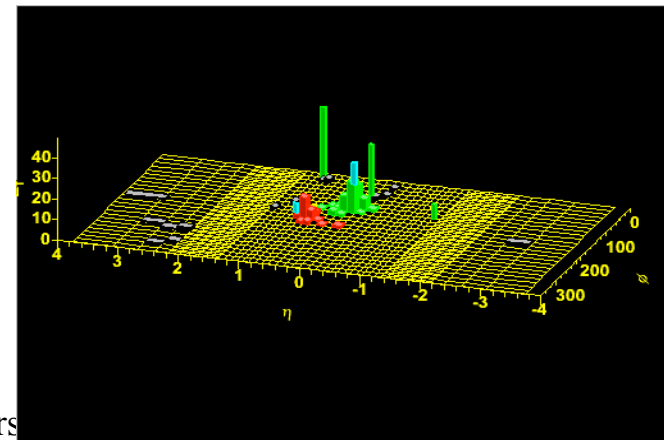
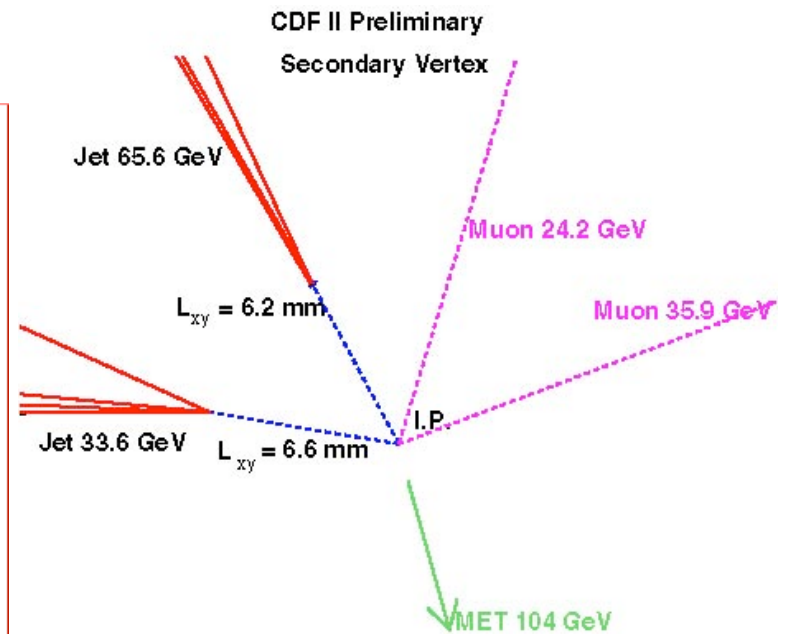
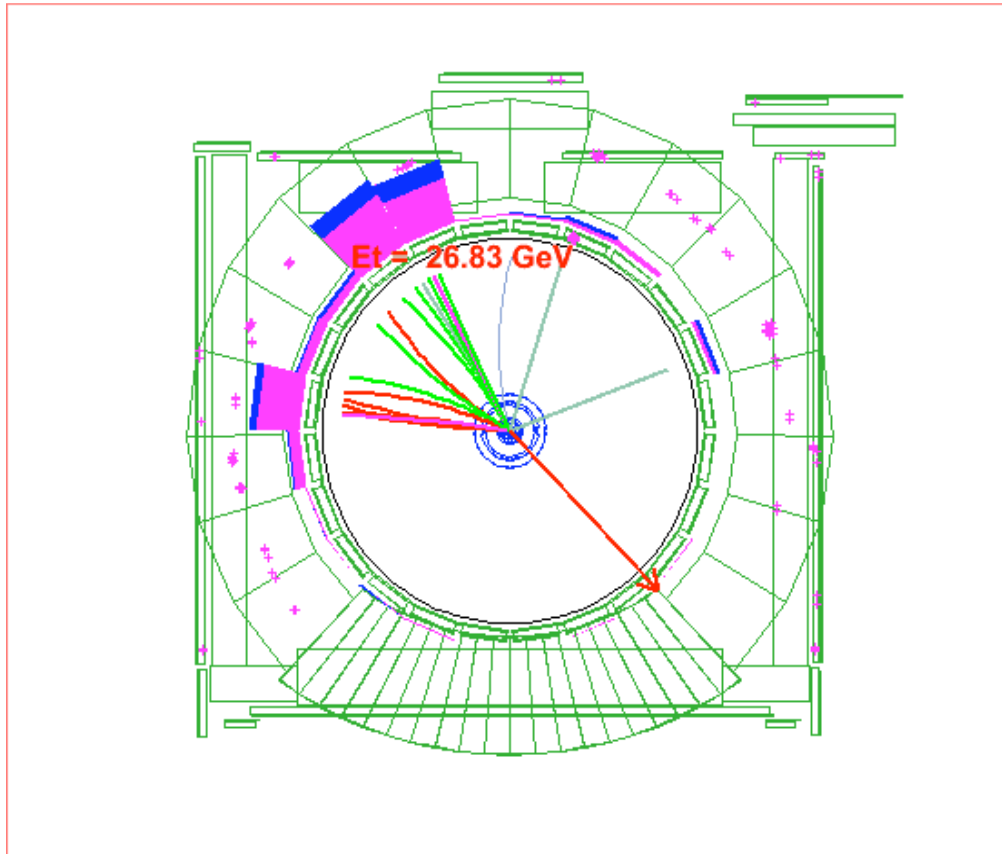


First Run II High p_T Physics Paper

Measurement of the $t\bar{t}$ Production Cross Section in $p\bar{p}$ Collisions at $s^{1/2} =$ 1.96 TeV using Dilepton Events



Double-tagged dimuon event





Cross Section Result

- We have measured the $t\bar{t}$ production cross section in the dilepton decay channel using 197 pb^{-1} of Run II data
- Our result is ($m_t = 175 \text{ GeV}/c^2$):

$$\sigma(t\bar{t}) = 7.0_{-2.1}^{+2.4} (stat)_{-1.1}^{+1.6} (syst) \pm 0.4(lum) \text{ pb}$$

consistent with SM prediction of $\sigma = 6.7_{-0.9}^{+0.7} \text{ pb}$



Summary

- Shift crews are performing well.
- Detector is running smoothly.
- First Run II high p_T physics paper submitted (check hep-ex tomorrow).